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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/734,737	12/13/2000	Toshifumi Kimba	2000-1706A	4508

7590 11/19/2003

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EXAMINER

PHAM, HOA Q

ART UNIT	PAPER NUMBER
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2877

DATE MAILED: 11/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/734,737

Applicant(s)

KIMBA ET AL.

Examiner

Hoa Q. Pham

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 May 2003 and 29 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 20-75 is/are pending in the application.
- 4a) Of the above claim(s) 20-28, 34-47 and 53-69 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 29, 31, 32, 48-50, 70-72 and 74 is/are rejected.
- 7) ☒ Claim(s) 30, 33, 51, 52, 73 and 75 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election without traverse of species C (claims 29-33, 48-52, 70-75) on August 29, 2003 is acknowledged.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 29, 31, 48, and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moriyama et al (5,609,511) (of record) in view of Sato et al (JP-10-335288)(of record).

Regarding claims 29, 31, 48 and 70; Moriyama et al discloses a nozzle (31) which being positioned so as to form a gap (d) between a distal end of the nozzle and a plane (4') of a polishing surface for polishing the film (4), the nozzle discharging a jet of a light-transmitting liquid from the tip end toward the film to form a column of a light transmitting liquid, a light emitter and receiver (S2) for emitting light to the film and receiving light reflected from the film (see figure 7). Moriyama et al does not teach the use of optical fibers for transmitting and/or receiving light from and/or to the measuring surface or detector; however, such a feature is known in the art as taught by Sato et al. Sato et al, from the same field of endeavor, teach that the optical fibers (10a and 10b)

are used for transmitting/receiving light (figure 1b). Those of ordinary skill in the art at the time the invention was made to include in Moriyama et al the optical fibers as taught by Sato et al for the purpose of transmitting/receiving light. The rationale for this modification would have arisen from the fact that using such optical fibers would prevent light that loss before reaching the detector, thus increase the signal to noise ratio.

4. Claims 32, 49-50, 71-72 and 74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moriyama et al and Sato et al as applied to claims 29, 48, and 70 above, and further in view of Adams et al (6,395,130).

Regarding claim 32, Sato et al does not teach the use of a single optical fiber for both transmitting and receiving light; however, such a feature is known in the art as taught by Adams et al. Adams et al, from the same field of endeavor, teach the use of a single optical fiber (113) for transmitting and receiving light (figure 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the optical fibers of Sato et al by a single optical fiber taught by Adams et al. The rationale for this modification would have arisen from the fact that using a single optical fiber would reduce the cost and size of the device.

Regarding claims 49, 50 and 71-72, Adams et al teaches that the polishing pad (109) is closer to the film than the distal end of optical fiber (113). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include such arrangement in the device of Moriyama and Sato et al. The rationale for

this modification would have arisen from the fact that using such arrangement would prevent the damage to the distal end of the fiber.

Regarding claim 74, see figures 1 and 1A of Adams et al.

***Allowable Subject Matter***

5. Claims 30, 33, 51-52, 73 and 75 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

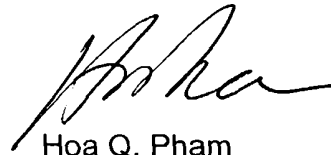
6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa Q. Pham whose telephone number is (703) 308-4808. The examiner can normally be reached on 6:30 AM to 5 PM, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (703) 308-4881. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

A handwritten signature in black ink, appearing to read 'H. Pham', is written above the printed name.

Hoa Q. Pham  
Primary Examiner  
Art Unit 2877

HP  
November 13, 2003